



# CMF / CRF Details

**CMF ID: 8983**

**Install oversized chevron signs**

**Description: Curve warning treatment with oversized chevron signs**

**Prior Condition: smaller 12x18in or 24x30in signs**

**Category: Signs**

**Study: [Safety Evaluation of Two Curve Warning Treatments: In-Lane Curve Warning Pavement Markings and Oversized Chevron Signs, Lyon et al., 2017](#)**

<b>Star Quality Rating:</b>	
<input type="text" value="4 Stars"/>	<a href="#">[View score details]</a>

<b>Crash Modification Factor (CMF)</b>	
<b>Value:</b>	0.89
<b>Adjusted Standard Error:</b>	
<b>Unadjusted Standard Error:</b>	0.254

<b>Crash Reduction Factor (CRF)</b>	
<b>Value:</b>	11 (This value indicates a <b>decrease</b> in crashes)
<b>Adjusted Standard Error:</b>	
<b>Unadjusted Standard Error:</b>	25.4

## Applicability

**Crash Type:** Nighttime

**Crash Severity:** All

**Roadway Types:** Not specified

**Number of Lanes:**

**Road Division Type:**

**Speed Limit:**

**Area Type:** Not specified

**Traffic Volume:** 173 to 27235 Annual Average Daily Traffic (AADT)

**Time of Day:** Night

### *If countermeasure is intersection-based*

**Intersection Type:**

**Intersection Geometry:**

**Traffic Control:**

**Major Road Traffic Volume:**

**Minor Road Traffic Volume:**

## Development Details

**Date Range of Data Used:**

**Municipality:**

**State:** IA, KS, MO

**Country:** USA

**Type of Methodology Used:** 2

<b>Sample Size Used:</b>	
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<b>Other Details</b>	
<b>Included in Highway Safety Manual?</b>	No
<b>Date Added to Clearinghouse:</b>	Nov-17-2017
<b>Comments:</b>	Without advisory speed signs or presence of advisory speed sign is unknown The number of crashes in the after period were not reported in this study, however, they have been recorded as 300 to give 10 points as a benefit of doubt for one or more of the following: (1) number of miles/sites in the reference/treatment group, (2) number of crashes in the references/treatment group, (3) reporting AADTs for the aggregate dataset but not for the disaggregate dataset used for CMF development.

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